Amendments to the Specification:

Amend paragraph [0003] to read as follows:

DE 197 41 944 A1 describes an arrangement in which the microstripline is applied to the upper face of the substrate (Figure 1). An end surface of the waveguide HL is fitted on the lower face of the substrate S. The substrate S has an aperture D in the area of the waveguide HL. The ~~, which~~ aperture D corresponds essentially to the cross section of the waveguide HL. A coupling element (not illustrated) is arranged on the microstripline ML and projects into the aperture D. The aperture D is surrounded on the upper face of the substrate S by a screening cap SK, which is electrically ~~conductively~~ connected by means of electrically conductive drilled holes (via holes) VH to the metallization RM on the lower face of the substrate S.

Amend paragraph [0004] to read as follows:

This arrangement has the disadvantage that the printed circuit board must be mounted conductively on a prepared mounting plate containing the waveguide HL. In addition, a precision manufactured shielding cap SK, which is mechanically positioned with precision and must be applied conductively, is required. The production of this arrangement is time-consuming and costly ~~owing~~ due to the large number of different types of processing steps. Further

disadvantages result from the large amount of space required as a result of the waveguide being arranged outside the printed circuit board.

Page 3, change the heading "DETAILED DESCRIPTION" to read as follows:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Amend paragraph [0020] to read as follows:

Figure 2 shows a plan view of the metallized layer of the substrate. This metallized layer is also referred to as a land structure for the microstrip/waveguide ~~micros trip/waveguide~~ junction. The land structure LS has a cutout A with an opening OZ. The microstripline ML runs through this opening OZ and ends within the cutout A. The cutout A is surrounded by via holes VH. These via holes VH are electrically conductive apertures in the substrate, connecting the land structure LS to the rear-face metallization (not illustrated) on the rear face of the substrate. The distance between the via holes VH is chosen to be sufficiently short that the radiated emission of the electromagnetic wave through the intermediate spaces is ~~small~~ minimized within the useful frequency range. The via holes VH may in this case advantageously also run in a number of rows, which are arranged parallel to one another, in order to reduce the radiated emission.

Amend paragraph [0023] to read as follows:

In Figures 3 and 4 ~~the illustration shown~~, the step annotated with the reference symbol ST1 is of such a height that, when the component B is fitted to the land structure as shown in Figure [[2]] 4 in an interlocking manner, the step ST1 rests directly on the microstripline ML, thus making an electrically conductive connection between the microstropline ML and the component B.

Amend paragraph [0024] to read as follows:

Figure 4 shows a longitudinal section through an arrangement according to the invention of a microstrip/waveguide junction. In this case, the component B as shown in Figure 3 is fitted in an interlocking manner to the land structure of the substrate S as shown in Figure 4 [[3]]. The component B is in this case fitted, in particular, to the substrate in such a way that an electrically conductive connection is made between the land structure and the component B.

Amend paragraph [0025] to read as follows:

On the lower face, the substrate S has an essentially continuous metallic coating RM. The waveguide area is ~~annotated with the~~ designated by reference symbol HB and the ~~in the illustration. The~~ junction area is designated by ~~annotated with the~~ reference symbol UB.

Amend paragraph [0026] to read as follows:

The microstrip/waveguide junction according to the invention operates on the following principle: the radio-frequency signal outside the waveguide HL is passed through a microstripline ML with the impedance Z_0 (area 1). The radio-frequency signal within the waveguide HL is carried in the form of the TE10 ~~TE1o~~ basic waveguide mode. The junction UB converts the field pattern of the microstrip mode in steps to the field pattern of the waveguide mode. At the same time, by virtue of the steps in the component B the junction UB transforms the characteristic impedance and ensures that the impedance Z_0 is matched, within the useful frequency range, to the impedance Z_{HL} of the waveguide HL. This allows a low-loss and low-reflection junction between the two waveguides.

Amend paragraph [0036] to read as follows:

Figure 9 shows a further advantageous embodiment of the microstrip/waveguide junction according to the invention. The microstrip/waveguide junction includes land structure LS, substrate S, rear-face metallization RM, a component B with a stepped shape ST2, wave guide opening DB, internal walls IW and support material TP. This embodiment makes it possible to provide a simple and low-cost waveguide junction in which the radio-frequency signal can be output through the substrate [[6]] S downwards through the continuous waveguide opening DB which is contained in the substrate. The

waveguide opening DB advantageously has electrically conductive internal walls (IW). The component B advantageously has a stepped shape [[ST]] ST2 in the area of the aperture DB on the side wall opposite the waveguide opening DB. This stepped shape [[ST]] ST2 deflects the wave in the waveguide through 90° from the waveguide area HB of the component B into the waveguide opening DB in the substrate S. A further waveguide or a radiating element, for example, can be arranged on the lower face of the substrate S, in the area of the waveguide opening DB. In the present example shown in Figure 9, a further support material TP, for example a printed circuit board having one or more layers or a metal mount, is fitted to the rear-face metallization RM. In comparison to DE 197 41 944 A1, the advantage of this arrangement is the simplified, more cost-effective design of the substrate S and of the support material TP. The waveguide opening is milled all the way through, and the internal walls are electrochemically metallized. Both process steps are standard processes which are normally used in printed circuit board technology and can be carried out easily.